

Table A-4. Hydraulic Conductivity (cm/sec) of Ellenton Formation

Geologic unit	Vertical conductivity			Horizontal conductivity		
	Range	Average		Range	Average	
Middle clay	$2.2 \times 10^{-9}$ - $1.4 \times 10^{-5}$	$1.1 \times 10^{-7}$		$1.6 \times 10^{-9}$ - $7.3 \times 10^{-5}$	$8.61 \times 10^{-5}$	
Lower sand	$3.5 \times 10^{-9}$ - $3.9 \times 10^{-4}$	$4.4 \times 10^{-5}$		$1.1 \times 10^{-8}$ - $2.6 \times 10^{-4}$	$9.39 \times 10^{-5}$	
Lower clay	$1.8 \times 10^{-8}$ - $4.0 \times 10^{-7}$	$1.9 \times 10^{-7}$		$2.3 \times 10^{-8}$ - $6.7 \times 10^{-7}$	$3.12 \times 10^{-7}$	

Source: DOE, 1987.

Table A-5. Typical Hydrologic Properties in Separations Areas<sup>a</sup>

Hydrogeologic unit	Hydraulic conductivity (m/day)					
	Horizontal (Kh)	Vertical (Kv)	Effective porosity	Transmissivity (m <sup>2</sup> /day)	Storage coefficient	
<b>Barnwell Formation</b>						
Upper	1.2	0.003	0.25	3	0.25	
Lower	3	0.008	0.25	3	0.25	
Tan clay	--	0.0016	--	--	--	
<b>McBean Formation</b>						
Upper	3	--	0.25	50	0.25	
Calcareous zone	3	--	0.25	50	0.25	
Green clay	--	$3.4 \times 10^{-6}$	--	--	--	
<b>Congaree Formation</b>						
Upper	34	--	0.25	670	0.0002	
Lower	17	--	0.25	670	0.0002	
"Tuscaloosa" Formation	40.8	--	0.20	2480	0.00045	

<sup>a</sup>Sources: Scott et al., 1987; Root, 1983; Du Pont, 1983. Terminology used for hydrogeologic units is after Siple, 1967 (see Figure A-2).

Table A-6. Typical Hydrologic Properties in A- and M-Areas<sup>a</sup>

Hydrogeologic unit	Hydraulic conductivity (m/day)					
	Horizontal (Kh)	Vertical (Kv)	Effective porosity	Transmissivity (m <sup>2</sup> /day)	Storage coefficient	
<b>McBean Formation</b>						
Upper	3	--	0.25	6	0.25	
Lower	3	--	0.25	55	0.25	
<b>Congaree Formation</b>						
Upper	9	--	0.14	215	0.14	
Lower	10	--	0.14	145	0.14	
Basal clay	--	0.00018	--	--	--	
<b>Ellenton clay - Upper Tuscaloosa clay</b>						
	--	0.0012	0.07	--	--	
<b>"Tuscaloosa" Formation</b>						
	12.2	--	0.20	1050	0.00043	

<sup>a</sup>Sources: DOE, 1984, 1985; Du Pont, 1983. Terminology used for hydrogeologic units is after Siple, 1967 (see Figure A-2).